

Application No.: 10/500,274
Amendment Dated: July 7, 2008
Reply to Office Action of: May 6, 2008

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Remarks/Arguments:

Claims 1-9, 12 and 13 are pending in the above-identified application for consideration. By the present Amendment, claims 1-9 are amended and new claim 13 is presented for consideration. Claims 10 and 11 have been previously withdrawn from consideration.

Rejections of the Claims Under 35 U.S.C. § 102(b)

Claims 1-9 and 12 are rejected under 35 U.S.C. § 102(b) for being anticipated by WIPO International Publication No. WO 01/92050 of Yamanashi. By the present Amendment, Applicants amend claims 1-9 to expedite prosecution. For the reasons discussed below, Applicants respectfully assert that Yamanashi does not disclose all of the features of claims 1-9 and 12.

In particular, Applicants respectfully assert Yamanashi does not disclose or suggest the following features of amended claim 3:

an electric power generation instructing means of determining the electric power generated by the fuel cell, **the electric power generation instructing means comprising a computer processor programmed with software instructions to decrease the electric power generated by the fuel cell depending on a decrease of load power to be supplied by the fuel cell, the computer processor being programmed with the software instructions to decrease the electric power generated by the fuel cell at a rate depending on one of a) a change of the temperature of the fuel processor and b) the temperature of the fuel processor.** (Emphasis added.)

These features can be found in the originally filed application at page 17, line 10 - page 19, line 8; page 24, lines 4-24; page 31, line 23 - page 32, line 9; and Figs. 4 and 6. No new matter has been added.

In the rejection of claim 3, the Office Action appears to interpret language in the claim as reciting functional limitations rather than structural limitations. (See Office Action, page 3, lines 15-20.) To expedite prosecution, by the present Amendment, Applicants amend claim 3 to recite that the "electric power generation

instructing means" comprises "**a computer processor programmed with software instructions** to decrease the electric power generated by the fuel cell depending on a decrease of load power to be supplied by the fuel cell, **the computer processor being programmed with the software instructions** to decrease the electric power generated by the fuel cell at a rate depending on one of a) a change of the temperature of the fuel processor and b) the temperature of the fuel processor." (Emphasis added.) Applicants similarly amend dependent claims 1, 2 and 4-9.

The above-identified application describes various algorithms which an electric power generation instructing means 5 is configured to perform. (See, e.g., Application, page 16, lines 12-15; page 22, lines 10-13; page 29, lines 17-20; and Figs. 2, 4, and 6.) Because the claims recite various features that the recited "computer processor programmed with software instructions" performs, and because the specification describes an electric power generation instructing means 5, Applicants respectfully assert that an interpretation of the amended claims as merely reciting functional language is not proper.

Yamanashi describes a fuel cell system that comprises a reforming reactor 120, a combustor 140, an evaporator 150, and a fuel cell 200. (See Yamanashi, page 8, lines 8-23.) Excessive reformed gas 205 that is discharged from fuel cell 200 is supplied to combustor 140 and is burned off. (See Yamanashi, page 10, lines 31-35.) After being combusted in combustor 140, the product exhaust gas is supplied to evaporator 150 where the heat from the exhaust gas is used to vaporize the methanol and water in evaporator 150 for supplying to reforming reactor 120. (See Yamanashi, page 10, line 31 - page 11, line 3.) Also included in the fuel cell system is a control unit 300. (See Yamanashi, page 9, lines 1-4.) Applications of the fuel cell system include an automobile.

In a first embodiment of the fuel cell system, control unit 300 receives a signal 301 from a temperature sensor which detects a temperature of cooling water for fuel cell 200, a signal 302 from a sensor that detects a position of an accelerator of the automobile, and a signal 303 corresponding to the vehicle's speed. (See Yamanashi, page 11, lines 6-12.) In this embodiment, Yamanashi does not describe a **computer processor programmed with software instructions** to reduce electric power

generated by fuel cell 200 **at a rate** depending on the temperature provided in signal 301. In fact, Yamanashi does not describe a **computer processor programmed with software instructions** to reduce electric power generated by fuel cell 200 **at a rate depending on any temperature or a change in any temperature**. Thus, Applicants respectfully assert that the first embodiment of Yamanashi does not disclose or suggest the above-quoted features of amended claim 3.

In a fifth embodiment of the fuel cell system of Yamanashi, reforming reactor 120 includes a temperature sensor 122 that provides a signal to control unit 300. (See Yamanashi, page 16, lines 19-25.) When an accelerator of the automobile is fully open and a speed of the automobile exceeds a limit, reforming reactor 120 and combustor 140 are shut down. (See Yamanashi, page 16, lines 26-34.) The temperature of reforming reactor 120 is used to determine how long it will remain shut down. (See Yamanashi, page 17, lines 5-7.) In this embodiment, Yamanashi does not describe a **computer processor programmed with software instructions** to reduce electric power generated by fuel cell 200 **at a rate** depending on the temperature measured by temperature sensor 122. In fact, Yamanashi does not describe a **computer processor programmed with software instructions** to reduce electric power generated by fuel cell 200 **at a rate depending on any temperature or a change in any temperature**. Thus, Applicants respectfully assert that the fifth embodiment of Yamanashi does not disclose or suggest the above-quoted features of amended claim 3.

In sixth through eighth embodiments of the fuel cell system of Yamanashi, reforming reactor 120 is, again, shutdown for a period of time depending, in part, on a temperature of reforming reactor 120. (See Yamanashi, page 18, lines 4-18; page 19, lines 15-35; and page 20, line 23 - page 21, line 8.) Thus, for reasons similar to those discussed above for the fifth embodiment of Yamanashi, Applicants respectfully assert that the fifth through eighth embodiments of Yamanashi do not disclose or suggest the above-quoted features of amended claim 3.

Accordingly, for the foregoing reasons, Applicants respectfully assert that Yamanashi does not disclose or suggest all of the above-quoted features of amended

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claim 3. Withdrawal of the rejection and reconsideration and allowance of the claim is respectfully requested.

Claims 1, 2, 4-9 and 12 depend from claim 3 and, therefore, include all of the features of claim 3. Accordingly, for at least the same reasons as discussed above for claim 3, Applicants respectfully assert that Yamanashi does not disclose or suggest all of the features of these claims. Withdrawal of the rejections and reconsideration and allowance of these claims are respectfully requested.

Applicants note that the dependent claims recite additional features performed by the recited "computer processor programmed with software instructions." For example, claim 4 recites that "the computer processor is programmed with the software instructions to (1) execute a first power limitation mode of preventing the decrease of generated electric power when the temperature of the fuel processor is not lower than a first threshold . . ."; claim 6 recites that "the computer processor is programmed with the software instructions to (1) execute a second power limitation mode of decreasing the generated electric power at a rate with a predetermined upper limit when the temperature of the fuel processor is not lower than a third threshold value . . ."; etc. For reasons similar to those discussed above, Applicants respectfully assert that Yamanashi does not disclose or suggest all of the features of these claims.

New Claim

By the present amendment, Applicants submit a new claim 13 for consideration. For reasons similar to those presented above, Applicants respectfully assert that Yamanashi does not disclose all of the features of claim 13. Favorable consideration is respectfully requested.

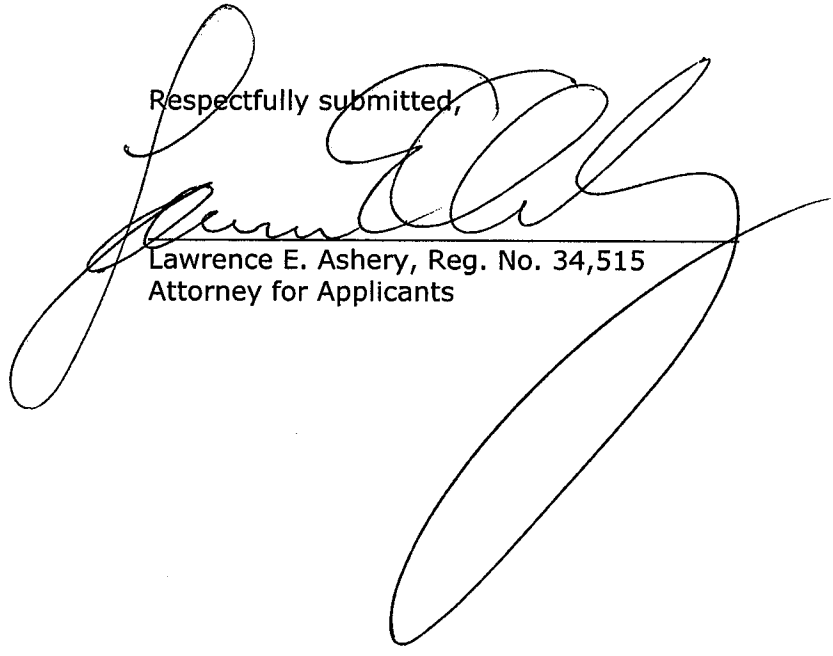
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Conclusion

In view of the foregoing remarks and amendments, Applicants respectfully assert that the claims are in condition for allowance and respectfully request early notification to that effect.

Respectfully submitted,


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